

MECHANICAL DEFOLIATION (TOPPING) AS A MANAGEMENT TOOL FOR KYLLINGA (*CYPERUS BREVIFOLIUS*)

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Summary Kyllinga (*Cyperus brevifolius* Rottb.) is a weed of increasing importance in irrigated pasture throughout northern Victoria. It is unpalatable and stock avoid otherwise productive swards in which it is present. There are no proven means of controlling kyllinga in pasture and the impact of management practices on this weed are unknown. During the growing season, farmers commonly mow or top paddocks after grazing to reduce competition from ungrazed plants. Topping, however, may facilitate the dispersal of kyllinga seed. Seed is the major source of weed infestation and persistence in the field. This paper reports on the impact of mechanical defoliation on growth and seed production of kyllinga

grown in pots under controlled environmental conditions. Plants were subject to defoliation at 3 and 5 cm above the soil surface at three and six weekly intervals. All defoliation treatments significantly reduced the DW of whole plants and all plants parts and flowers/seed heads present at each harvest, but did not affect the average weight of seed heads or cumulative seedhead production in plants cut at six weekly intervals. Plants cut to 3 cm every three weeks produced around 40% more seedheads than uncut plants. Consequently, topping in the field is unlikely to reduce the weed seed burden and alone will not provide a successful means of managing kyllinga infestations or reducing their spread.